

injection means for injecting fluid or gas to a central portion of said plurality of hollow fiber membranes and outwardly radiating the fluid or gas from the central portion, thereby injecting the fluid or gas to an interior of said filter cylinder.

3. (Amended) A filter device according to claim 2, wherein said filter cylinder is vertically disposed.

4. (Amended) A filter device comprising:
a plurality of hollow fiber membranes having a bundled end and a free end, and said free end arranged to spread in fluid;

injection means for injecting fluid or gas to a central portion of said plurality of hollow fiber membranes and outwardly radiating the fluid or gas from the central portion to agitate the hollow fiber membranes; and

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cut a funnel member disposed below said plurality of hollow fiber membranes and narrowing in a downward direction.

5. (Amended) A filter device comprising:

a filter cylinder;

a funnel member narrowing in a downward direction and arranged within said filter cylinder;

a filter chamber in said cylinder and disposed above said funnel member;

a recovery chamber in said cylinder and disposed below said funnel member;

a plurality of hollow fiber membranes having a bundled end and a free end, said free end arranged to spread flexibly within said filter cylinder, and said plurality of hollow fiber membranes disposed above said filter chamber; and

injection means for injecting fluid or gas to a central portion of said plurality of hollow fiber membranes and outwardly radiating the fluid or gas from the central portion thereby injecting the fluid or gas to an interior of said filter cylinder.

6. (Amended) A filter device according to claim 5, wherein said filter cylinder is vertically disposed.

7. (Amended) A filter device comprising:

a filter cylinder vertically disposed;

a funnel member narrowing in a downward direction and arranged within said filter cylinder;

a filter chamber in said cylinder and disposed above said funnel member;

a recovery chamber in said cylinder and disposed below said funnel member;

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a plurality of hollow fiber membranes having a bundled end and a free end, said free end arranged to spread flexibly within said filter cylinder, and said plurality of hollow fiber membranes disposed above said filter chamber; and

injection means for injecting fluid or gas to a central portion of said plurality of hollow fiber membranes and outwardly radiating the fluid or gas from the central portion thereby injecting the fluid or gas to an interior of said filter cylinder; and

a backwash chamber disposed above said filter cylinder to temporarily store filtrate fluid permeated through said plurality of hollow fiber membranes and to impart fluid pressure during backwashing.

8. (Amended) A filter device according to any one of claims 2, 5, and 7, wherein said filter cylinder has an inner diameter of 1.5 to 3.0 times the diameter of the bundled end of said plurality of hollow fiber membranes.

9. (Amended) A filter device according to any one of claims 2, 5, and 7, wherein said injection means is structured with an injection pipe penetrating a bottom surface of said filter cylinder and inserted through a lower end opening of said funnel member to reach the central portion of said plurality of hollow fiber membranes.

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10. (Amended) A filter device according to claim 9, wherein the inserted end of the injection pipe is disposed between one-third and two-thirds down the length of the plurality of hollow fiber membranes.

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11. (Amended) A filter device according to any one of claims 1, 2, 4, 5, and 7, wherein said injection means injects raw fluid and bubbling air.--

Please add claim 12.

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-- 12. (New) A filter device according to claim 2, wherein said injection means is structured with an injection pipe penetrating a bottom surface of said filter cylinder and inserted through a lower end opening of said funnel member to reach the central portion of said plurality of hollow fiber membranes, and said injection pipe having a hole at a circumference of the injection pipe. --
